

MENTHA LONGIFOLIA Huds. Fl. Angl. 221. 1762.

Mentha spicata β . *longifolia* L. Sp. Pl. 2: 576. 1753.

Mentha sylvestris L. Sp. Pl. ed. 2, 2: 804. 1763.

MENTHA ROTUNDIFOLIA Huds. Fl. Angl. 221. 1762.

Mentha spicata γ . *rotundifolia* L. Sp. Pl. 2: 576. 1753.

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NOTES ON THE PLANTS OF HINGHAM, MASSACHUSETTS.

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WHEN the History of Hingham was published by the town in 1893, there was included in it "The Botany of Hingham," by Thomas T. Bouvé, and "The Trees and Shrubs of Hingham," by his son, Edward T. Bouvé. Both of these men were long connected officially with the Boston Society of Natural History. Charles J. Sprague, the artist-botanist, coöperated with the elder Bouvé in the preparation of the Flora, and local botanists also assisted. The list is based on the sixth edition of Gray's Manual (1890).

No less than 877 plants are given, making it a very complete list for an area of 12,973 acres. There seem to be very few errors, although many of the species have subsequently had their names changed, and there have been many new segregates since 1890. Since I came to Hingham in 1908, and since Dr. C. A. Cheever came in 1917, each of us has explored the town, and each of us has kept a check-list of the local flora. There are still many species which we have not checked off, but we have succeeded in finding many of the plants which were reported as rare, and we have added several new species, not merely segregates, to the known flora of the town.

Five of the plants in the flora, *Asclepias verticillata*, *A. tuberosa*, *Gentiana crinita*, *Sarracenia purpurea* and *Sporobolus asper* are apparently extinct, and three others, *Phragmites communis*, *Kalmia latifolia* and *Epigaea repens* are nearly gone, while *Ilex opaca* is making a hard fight against being eliminated by the Christmas spirit.

Along the shore, in salt marsh openings, is an abundance of *Salicornia ambigua*, the perennial, along with the two annual species of the region. The young shoots of this plant, before they root into the sand, are curved, forming almost perfect circles for a few weeks be-

fore they are fully developed. *Atriplex arenarium* is frequent, and *Aster tenuifolius*, with its pretty daisy-like flowers, is in at least one of the marshes. Last fall we were much pleased to find *Bassia hirsuta*,¹ so common in South Boston, sparingly introduced close to the salt water, and near by *Euphorbia polygonifolia* in the sand. There are also a few plants of the big mallow, *Hibiscus Moscheutos*. Just back from salt water grows the pretty pink *Strophostyles angulosa*.

Near the salt marsh, not far from its two parents, there are plants of the hybrid *Solidago asperula*, always an interesting find. At one place, the cottage settlement of Wampatuck, there is an abundance of the rare *S. speciosa*, growing among the low oaks and in the vacant lots. *S. suaveolens* is especially abundant in some places. In the southern part of Hingham there is plenty of *S. rugosa*, var. *sphagnophila*, and one of the commonest species is *S. Elliottii*, which drops out to the north, only to reappear again in Nova Scotia.²

Asclepias phytolaccoides is frequent by wooded roadsides, a tall, handsome plant. *A. quadrifolia* is a rarer plant which is sometimes found. *A. verticillata*, the rarest species around Boston, I found in some abundance on ledges when I first came to town, but I have not been able to find it recently. *Triosteum perfoliatum* we found last summer, growing in a thicket on an esker. It was 120 cm. tall, and is in many ways quite different from var. *aurantiacum* (Bickn.) Eames & Wiegand which is commoner in eastern Massachusetts, though it has not been found here. *Ludvigia alternifolia* is a queer plant, growing in two places, one beside a rivulet in dry open woods, the other close to the railway track in the village, as if introduced there.

One of our friends, Mr. Cyril C. Smith, has called our attention to the variation in the number of leaves in the whorls of *Lysimachia quadrifolia*. This is exceedingly abundant in dry open woods, although the great majority of the plants have four leaves to each whorl, there are numerous variants, having two, three, five, six, and even seven leaves.

One of the best discoveries was *Corallorhiza trifida*, which Dr. Cheever found near a cold spring, a situation similar to the place where it grows in Norwood. *Arethusa bulbosa* was also found by him in a small bog, and in the same bog is *Rhododendron canadense*, a rare

¹ RHODORA xi. 120, 1909; xvii. 176, 1915.

² Fernald, RHODORA xxiii. 144, 151, 157, 169, 292. 1921.

plant in Plymouth County. In this same bog Dr. Cheever has also found *Habenaria lacera* and *Calopogon pulchellus*. *Habenaria flava* is another rare orchid we have seen in town.

In one of the swamps is *Carex riparia*, frequent in western Vermont, but not so well known in eastern Massachusetts. It has blue-green leaves, and looks quite distinct from the abundant *C. stricta* and the other sedges in the swamp. On one of the eskers, and in another place in light pine woods, there are good colonies of *C. laxiculmis*.

There are twenty-three kinds of ferns known in town. *Thelypteris simulata*, *Woodwardia virginica* and *W. areolata* are frequent, this association of the three species being characteristic of low woods near the coast as far north as New Hampshire. *Thelypteris Boottii* was for some reason overlooked by the authors of the list in their survey of the town. Dr. Cheever has found one good colony of *Adiantum pedatum*, not on the list. *Lycopodium inundatum* is abundant at one station. *L. annotinum* is on the Bouvé list, and after a careful search was found in two stations a quarter of a mile apart, in deep woods.

All in all we have had a very good time checking up this old list, and we hope to continue our explorations till we have as complete a knowledge of the town flora as did Mr. Bouvé and his associates.

HINGHAM, MASSACHUSETTS.

A NEW VARIETY OF *BIDENS HETERODOXA*.

NORMAN C. FASSETT.

THE fresh-water tidal flats at the mouth of the Kennebec River, in central Maine, extend from a mile above Bath to Augusta, a distance of nearly thirty miles. The lower part of this estuary, and the mouths of the rivers entering it, have been rather extensively explored. Professor Fernald and Mr. Bayard Long have collected along the tidal shores of the Cathance River at Bowdoinham, and the writer has botanized most of the western shore of Merrymeeting Bay. Large collections of *Bidens* made in these regions have consisted of three entities: *B. hyperborea* Greene, varieties *colpophila* (Fernald & St. John) Fernald and *cathancensis* Fernald, and *B. Eatoni* Fernald, var. *kennebecensis* Fernald, the last two being endemic to this estuary system.